

Board of Treasury, April 8, 1786

Board of Treasury, April 8, 1786.

SIR,

WE do ourselves the honor of enclosing the report of this board upon the several references of Congress, relative to the establishment of a Mint for the United States of America.

We judge it necessary to submit several principles for the decision of Congress, previous to our making a report on this subject, and on the various propositions that have been made for undertaking a copper coinage.

Congress by their act of the 6th July last, resolved, that the money unit of the United States should be a dollar—but did not determine what number of grains of fine silver should constitute the dollar.

We have concluded that Congress by their act aforesaid, intended the common dollars that are current in the United States, and we have made our calculations accordingly—we have assumed various sums for the money unit, and find that there are several, which would make the decimal arithmetic more accurate, when compared with the money of account in the several states, than the dollar which is current at four shillings and six-pence sterling.—But if the decimal arithmetic should be generally adopted in keeping of accounts, this inconvenience will soon be got rid of, probably much sooner than that which might arise from assuming a new, and unusual sum for the dollar or money unit.

The British mint for a pound troy weight of standard silver, is sixty-two shillings sterling, which is issued at the same value after it is coined. It will appear from the propositions we have submitted that we have made a difference of two percent between coined and

Library of Congress

uncoined silver, which addition of two per cent to the coined silver appears to us to be necessary on account of waste, and also to defray the expence of coinage.

A pound troy weight of standard silver of the United States will therefore be issued from their mint, at the rate of three pounds three shillings and three-pence sterling, or four pounds four shillings and four-pence lawful money.—The money unit or dollar will contain three hundred and seventy-five grains and sixty-four hundredths of a grain of fine silver. —A dollar containing this number of grains of fine silver, will be worth as much as the new Spanish dollars.

2

We have also considered gold as being of a different value before and after it is coined, making an allowance for coinage of one half per cent.

We find the difference that custom has established between coined gold and coined silver, in the United States to be nearly as one of the former to fifteen and six tenths of the latter. We have endeavoured to preserve this relative difference, as we apprehend less inconvenience will arise from it among the citizens of the United States, than from reducing the relative value, which however has been proposed by all those who have written upon the subject of a coinage for the United States; but it does not appear from what they have said, that they had attended accurately to the real difference which custom has established between gold and silver in the United States.

We find the relative value between gold and silver to be as follows: England as one is to 15.210 France as one is to 14.458 Spain as one is to 14.85 Holland as one is to 14.44 Portugal as one is to 15.78 America as one is to 15.6 nearly.

The following tables will shew the value of coined and uncoined silver and gold on the principles above stated.

3

Silver and Gold, on the Principles above stated. [table]

4

Gold is receivable at the several banks in the United States at the rate of £. 48 sterling for a pound, troy weight.

We have proposed that there shall be two pieces of gold, the one equal to ten dollars, weighing 246.268 grains of fine gold, and the other equal to five dollars' weighing 123.134 grains fine gold; which will preserve the current value of gold, very nearly the same as it is at present.

C O P P E R. Copper being a hard and impure metal does not as gold and silver require any alloy, to prevent its being impaired in currency.

We propose to divide two pounds and one quarter of a pound avoirdupois weight of copper into one hundred coppers—they will be issued from the mint at about the same rate of advance that the British put upon their copper coinage, and will contain about eight per cent more copper than the British half-pence.

We should have submitted our propositions on this subject sooner, if a sufficient number of states had been convened to determine on the object of this report.— Our first idea was to fix the value of the dollar or money unit at $4/2$ sterling— and we had prepared several tables to shew the operations of decimal computation when compared with that of the money account in the several states, valuing the dollar at $4/2$ and $4/6$ sterling—But after mature reflection we judged it most adviseable for the reasons mentioned in the former part of our letter, to adopt the value of the present current dollar for the money unit; and to make our report conformably to it.

We have likewise enclosed a report, formed on the principle of fixing the dollar (or money unit) at $6/3$ sterling, and have added to the tables above mentioned certain calculations which shew the operation of the decimal arithmetic, estimating the dollar at $6/3$ or $12/6$

Library of Congress

sterling. Should the last sum be adopted for the money unit (which we are informed has been suggested, the report last mentioned can be easily made conformably to it. In that case the unit will be a money of account (as the English pound sterling) and not an actual coin.

When Congress have determined the certain value of the money unit, we shall be ready to report immediately on the different proportions which have been laid before that honorable body for the establishment of a copper coinage; an object which becomes daily of more consequence, not only from the foreign importation of base copper coin; but from private contracts made in some of the states for striking copper, the specimens of which are extremely base and ill executed.

We have the honor to be Your Excellency's obedient and humble servants, **SAMUEL OSGOOD WALTER LIVINGSTON.**

His Excellency the President of Congress.

The Board of Treasury, to whom it was referred to report the form of an Ordinance for the establishment of a **MINT**, and the proposals of sundry individuals relative to Copper Coinage,—

Beg leave to report to Congress,—

THAT, after a mature consideration of this subject, they are of opinion, that it will be necessary to submit to their consideration certain principles relative to the weight and alloy of gold and silver coins, previous to the establishment of the proposed ordinance; they therefore submit the following propositions:

That the standard of the United States of America for gold and silver, shall be eleven parts fine, and one part alloy.

Library of Congress

That the money unit of the United States (being by the resolve of Congress of the 6th July last, a dollar) shall contain, of fine silver, three hundred and seventy-five grains, and sixty-four hundredths of a grain.

6

That the money of account, (to correspond with the division of coins, agreeably to the above resolve) should proceed in a decimal ration, agreeably to the forms and manner following, viz. *Mills*, The lowest money of accmpt, of which one thousand shall be equal to the federal dollar, or money unit, 0.001 *Cents*, The highest copper piece, of which one hundred shall be equal to the dollar, 0.010 *Dimes*, The lowest silver coin, ten of which shall be equal to the dollar, 0.100 *Dollar*, The highest silver coin, 1.000

That betwixt the dollar and the lowest copper coin, as fixed by the resolve of Congress of the 6th July last, there shall be three silver coins and one copper coin.

That the silver coins shall be as follows: One coin containing one hundred and eighty-seven grains and eighty-two hundredths of a grain of fine silver, to be called *A Half Dollar*. One coin containing seventy-five grains and one hundred and twenty-eight thousandths of a grain, of fine silver, to be called *A Double Dime*. And one coin containing thirty-seven grains and five hundred and sixty four thousandths of a grain, of fine silver, to be called *A Dime*.

That the two copper coins shall be as follows: One equal to the one hundredth part of the federal dollar, to be called *A Cent*.

And one equal to the two hundredth part of the federal dollar, to be called *A Half Cent*.

That two pounds and a quarter, avoirdupois weight, of copper, shall constitute one hundred cents.

That there shall be two gold coins.

One containing two hundred and forty-six grains and two hundred and sixty-eight thousandths of a grain, of fine gold, equal to ten dollars, and to be stamped with the impression of the American eagle, and to be called an *Eagle*.

One containing one hundred and twenty-three grains and one hundred and thirty-four thousandths of a grain of fine gold, equal to five dollars, to be stamped in like manner, and to be called *A Half Eagle*.

That the mint price of a pound troy weight of uncoined silver, eleven parts fine, and one part alloy, shall be nine dollars, nine dimes and two cents.

The mint price of a pound, troy weight, of uncoined gold, eleven parts fine, and one part alloy, shall be two hundred and nine dollars, seven dimes and seven cents.

All which is humbly submitted to the judgment of Congress. **SAMUEL OSGOOD,**
WALTER LIVINGSTON.

April 8, 1786.

The following Observations on the Principles upon which the above Report is founded, are annexed for the Consideration of Congress.

MR. JEFFERSON, in his notes on the establishment of a money unit, and on a coinage for the United States, observes, that in fixing the unit of money, these circumstances are of principal importance:

1st. "That it be of convenient size to be applied as a measure to the common transactions of life."

2d. "That its parts and multiples be in an easy proportion to each other, so as to facilitate the money arithmetic."

8

3d. "That this unit and its parts, or divisions, be so nearly of the value of some known coins, as that they may be of easy adoption for the people."

"That the Spanish dollar seems to fulfil all these conditions."

It is readily acknowledged that no money unit can be adopted by the United States that will be so familiar to, and well known by the people, as the dollar that is generally current at four shillings and six-pence sterling; and that the size will be convenient as a common measure. If there should be any objections against adopting it, they must arise from the decimal divisions of it. It is probable that some other sum might be adopted for the money unit, which would free the decimal arithmetic from those inconveniences which are occasioned by quantities that cannot be noted down decimally, or when noted down, do not correspond with the value of any known coins. If the common dollar should be fixed upon as a money unit, the cents will not correspond with any copper coin known in the United States. A single cent will be about eight per cent better than a British half-pence.

In the aforesaid notes it is observed, that should the unit be fixed at three hundred and sixty-five grains of fine silver, gold at fifteen for one, (or rather at one for fifteen and the alloy of both be one twelfth, the weight of the coins, will be as follows: The golden piece containing 243 # grains of pure metal, 22.12 grains of alloy will weight 11 dwt. 14.18 grains. The unit or dollar containing 365 grains of pure metal 33.18 grains of alloy, will weigh 16 dwt. 14.18 grains. The half dollar, or five tenths, containing 182 ½ grains of pure metal, 16.59 grains of alloy, will weight 8 dwt. 7.09 grains. The fifth, or pistereen, containing 73 grains of pure metal 3.318 grains of alloy, will weight 1 dwt. 15.818 grains. The twentieth, or halfbit, containing 18 ¼ grains of pure metal, 1.659 grains of alloy, will weight 19.9 grains.

Library of Congress

It is necessary to assume a principle by which we may determine whether the above weights are right. And for this purpose let us adopt the value of a pound troy weight of silver, the same as the British have done, viz. 62/. sterling, without 9 making any allowance for the difference of alloy. Let there be allowed for waste and expence of coinage, two per cent. for silver, and an half per cent. for gold. 744d. : 5.280 :: 54: 383.225
102 : 100 :: 383.225 : 375. 71

Therefore the unit, or 54d. sterling, ought to contain 375.71 grains of fine silver.

In 54d. British money there are 385.365 ditto. Difference, 9.715

Mr. Jefferson places 54d. at 365 grains pure metal. Difference between this and British
20.365 385.365

Mr. Jefferson therefore proposes to issue a piece of silver money, nominally worth 54d. sterling, but really 5 ½ per cent. less valuable.

The piece of gold equal to ten dollars, ought to weigh 250.42 grs. pure. Proposed weight,
243.333 Difference 7.087

To issue a golden coin in England equal to 540d. it should contain of fine gold, 254.14 grs. fine. Proposed weight, 243.333 Difference, 10.807

If Congress should adopt Mr. Jefferson's plan, then we should have gold and silver coins about five per cent. less valuable than British money. As this is too great an allowance for waste and expence of coinage, the pieces mentioned by Mr. Jefferson, ought to weigh as follows, making an allowance of two per cent. for silver, and an half per cent. for gold, for coinage, &c.

SILVER PIECES.

Library of Congress

The money unit, or dollar, 375.71 grs. fine silver. The half dollar, 187.85 The pistereen, or two tenths, 75.14 The tenths, 37.57

10

GOLD PIECES.

One equal to ten units, 250.42} relative value 1 for 15 One equal to five units, 125.21}

To make the above weights of gold correspond with the following calculations, there ought to be three per cent. added to the 375.71 grains of fine silver in the money unit.

As 252d. or 21/. sterling is to 118.65 grains fine gold in a guinea, so is 540d. or ten dollars, to the number of grains of fine gold that there should be in 540d, agreeably to the British.

252d. : 118.65 :: 540d, : 254.14 100.5 : 100 :: 254.14 : 252.875

Therefore, to deduct half per cent. for coinage, there ought to be in ten dollars 252.875 grains fine gold.

If it should be thought best to preserve the same relative value between gold and silver that custom has established in the United States, then the two pieces of gold above mentioned ought to weight as follows:

One hundred and twenty-six grains of standard gold of England, passes in the United States for 252d. sterling. The pound troy weight of standard gold is therefore worth £ 48 sterling. 126 : 252d. :: 5.760 : 11.520d. equal to £.48 sterling. 11.520d:5.280::540d: 247.5 or 11.520d:5.760::540d: 270 | 22.5 22.5 247.5 As 100.5 : 100 :: 247.5 : 246.268 As 252: 126 :: 540d. : 270 grs. standard gold in ten dollars.

11

Library of Congress

The true relative value between gold and silver coins in England, is as follows: 5280 grains of fine silver, pass for 61/5 1/4 sterling; and 5.280 grains of fine gold, pass for 11.214d. sterling. 61 5 1/4 11.214 12 4 737 2949|44.856|15.210 true difference in England. 4 2949

If therefore the money unit contains of fine silver 375.71 grs. ten times that number will be 375.710, which, divided by the number of grains in the piece of gold equal to ten dollars, will be 246.268|375.710|15.256 relative difference in the United States.

PRINCIPLES for establishing a **COINAGE**, valuing the Dollar at 4S2 sterling.

The Board of Treasury, to whom it was referred to report the form of an Ordinance for the establishment of a **MINT**, and the proposals of sundry individuals relative to Copper Coinage,—

Beg leave to report to Congress,—

THAT, after a mature consideration of this subject, they are of opinion, that it will be necessary to submit to their consideration certain principles relative to the weight and alloy of gold and silver coins, their proposed relative value, the price of foreign coin, and the money of accmpt, previous to the establishment of the proposed ordinance.

That the standard of the United States of America for gold and silver, shall be eleven parts fine, and one alloy.

That the money unit of the United States (being by the resolve of Congress of the 6th July last, a dollar) shall contain, of fine silver, three hundred and fifty grains and nine tenths of a grain.

12

That the money of account, (to correspond with the division of coins, agreeably to the above resolve) should proceed in a decimal ration, agreeably to the forms and manner

Library of Congress

following, viz. *Mills*, (The lowest money of accmpt,) of which one thousand shall compose the federal dollar, the money unit, 0.001 *Cents*, (The highest copper piece,) of which ten should constitute a coin to be stiled a dime, equal to mills, 0.010 *Dimes*, (The lowest silver coin,) of which ten shall compose a dollar, each of which to be equal to mills, 0.100 *Dollar*, The highest silver coin, equal to mills, 1.000

That betwixt the dollar (the money unit, which will be represented by a coin containing the quantity of fine silver, as specified in the first proposition) and the lowest copper coin, (as fixed by the resolve of Congress of the sixth July last) there shall be three silver coins and one copper coin.

That the silver coins shall be as follows: One coin containing one hundred and eighty-seven grains, four tenths, and one twentieth part of a grain of fine silver, to be called, *A Half Dollar*. One coin containing twenty-one grains and eight tents of a grain of fine silver, to be called *A Double Dim*. One coin containing thirty-seven grains and 900/1000 of a grain of fine silver, to be called *A Dim*.

That the two copper coins shall be as follows: One equal to the one hundredth part of the federal dollar, to be called, *A Cent*. One equal to the two hundredth part of the federal dollar, to be called *A Half Cent*. That two pounds avoirdupois weight of copper, shall constitute one hundred cents, and so on in proportion of the lowest copper coin.

13

That there shall be two gold coins.

One containing 237 $\frac{9}{10}$ grains of fine gold, equal to ten dollars, to be stamped with the impression of an eagle, and called by the name *Eagle*.

The other containing 118 $\frac{85}{100}$ grains of fine gold, equal to five dollars, stampd in like manner, and called *Half Eagle*.

Library of Congress

That the mint price for one pound troy weight of gold, eleven parts fine, and and one part alloy, shall be two hundred and twenty dollars, eight dimes, three cents and two mills.

The mint price of a pound troy of silver, eleven parts fine, and one part alloy, should be fourteen dollars, seven dimes, four cents, and six mills.

That the gold coin of the United States of America shall be one half per cent above the mint price.

That the silver coin of the United States of America shall be two per cent above the mint price.

That foreign coin shall be current at the treasury of the United States, at the mint price.

That after the year no foreign brass or copper pieces shall be current in the United States of America.

GOLD.

Thirty louis d'ors of 24 livres each, ought to weigh a mark of eight ounces; but they are lawful if the 30 louis d'ors want 15 grains in the whole. This allowance is called the remedy of weights.

The standard is 22 carats fine; but louis d'ors are lawful when they are $21 \frac{22}{32}$ carats fine. This allowance is called the remedy of law.

Price of gold at $21 \frac{22}{32}$ is 709 livres per mark of 8 ounces. Mark of 8 ounces makes 30 louis d'ors, value 720 livres. Expence of coinage and waste, about two livres on the mark. Profit to the Sovereign, 9 livres per mark, of $1 \frac{4}{15}$ per cent.

14

SILVER.

Library of Congress

Eight 6 livre pieces and $\frac{3}{10}$ ought to weigh a mark of 8 oz. but are lawful currency when the pieces differ only 36 grains per each mark.

Standard 11 parts fine and one part alloy; but they are current 3 and 6 livre pieces at 10-21: that is, three grains short of the standard.

Price of silver 48 livres 9 sous per mark. Standard 10.21. A mark gives 8 six livre pieces and $\frac{3}{10}$ or 49 livres 16 sous.

Expence of coinage and waste, $14 \frac{1}{2}$ sous per mark.

Profit, $12 \frac{1}{2}$ sous per mark, or $1 \frac{7}{24}$ per cent.

A mark of gold after coined, is 720 livres.

A mark of silver after coined, is 49 livres 16 sous. 49.16 720 20 20 996 14,400 | 14.458
difference between gold and silver in France.

In England it is 15.072; therefore as 14.458 : 100 :: 15.072 : 104.25. The difference therefore in favor of gold in England is about $4 \frac{1}{4}$ per cent more than in France.

If the United States place the difference at 14.75, it will be nearly a mean between France and England. 14.75 : 100 :: 15.072 : 102.115 nearly 2 per cent in favor of England. 14.75 : 100 :: 14.458 : 98. - about 2 per cent better than in France.

A pound weight troy of gold, eleven twelfths fine, is divided in England into $44 \frac{1}{2}$ guineas —£ 46 : 14 : 6.

As no profit is to be made by the public on coinage, it will be sufficient to allow an half per cent for the waste and expence of the coinage of gold. And two per cent for the waste and expence of the coinage of silver.

Library of Congress

In a pound troy weight of gold, there are of fine gold 5280 grains. Deduct half per cent for coinage, viz. $100: 0.5 :: 5280 : 26.4$ 26.4 5253.6

Thus 5.253.6 grains of fine gold coined, will be equal to 5280 grains of uncoined gold.

In a pound weight troy of silver, there are of fine silver 5280 grains. Deduct 2 per cent for coinage, &c. $100: 2 :: 5280 : 105.6$ 105.6 5174.4

Thus 5174.4 grains fine coined silver, are equal to 5280.

It is proposed that the federal dollar shall be equal to 4S2 sterling, excepting the 2 per cent for coinage.

How many grains then ought the federal dollar to contain of fine silver, that it may be just 2 per cent less valuable than 4S2 sterling;

In a pound weight troy of standard silver of England, there are grains of fine silver, 5328; which are divided into 62S. sterling, or 744d.—If two per cent be deducted from this number of grains, and the remainder is divided into 62Ss. sterling, or 744d. then we shall have a principle to find the number of grains, that 4S2 sterling ought to contain, allowing it to be 2 per cent less valuable than 50d. of British money. $100 : 2 :: 5328 :$ 106.56 106.56 5221.44

Therefore in the currency of the United States, there will be in 62/. sterling, or 744d.—5221.44. Now, if 744d, has 5221.44 grains of fine silver, what ought the federal dollar or 50d. to have? $744: 5.221.44:: 50: 350.9$.

16

A federal dollar therefore, upon the above principles, must have 350 9/10 grains of fine silver.

Library of Congress

As the proposed standard for silver is $11\frac{1}{12}$ fine, there will consequently be in a pound weight troy of fine silver, 5280 grains, which divided by 350 $\frac{9}{10}$ grains, will give the dollars the the same must be divided into 350.9 | 5280 | 15.047. 3509 17710 17545 16500 14036 24640 24563 77 consequently a pound weight troy will be divided into fifteen dollars, no tenths, four cents, and seven mills.

If 5221.44 grains of fine silver has 744d. what will 5280, the number of grains of fine silver in a pound of the proposed standard have? 5221.44 : 744 :: 5280 : 752d. $\frac{3}{10}$. which are equal to 15 dollars, no dimes, 4 cents, and 7 mills, as above.

From the above may be ascertained the price that must be given at the mint for a pound of standard silver; for every 100 grains that the mint gives, it must receive 102 in exchange. As a standard pound contains 5280 grains of fine silver, if two per cent is deducted therefrom, and the remainder divided by 350.9, the quotient will be the amount that must be given for the same in dollars and parts of dollars. 100 : 2 :: 5280 : 105.6 105.6 350.9 5174.4 | 14.746 Difference of 2 per cent, is - 301 15.047

17

This calculation is made upon the grains of fine silver. It may be proved this way by the money of account. 100 : 2 :: 15.047 : ,301. 301 14.746.

Having ascertained what is to be given for a pound weight troy of fine silver as bullion, we proceed to the division thereof. Dollars & Parts. 1 lb. is 14.746 61S. $4\frac{1}{2}$ 1 oz. 1.228 $\frac{5}{1}$ $\frac{3}{4}$ 1 dwt. 0.060 0S3 1 grain 0.0025 $\frac{1}{4}$

The weight of a federal dollar with the alloy 382.8 grains, 15.047 | 5.760 | 382.8. Deduct $\frac{1}{12}$ which proves the whole 31.9 350:9

From the foregoing calculations it will be easy to make the necessary divisions of the silver coin.

GOLD.

It is proposed that the difference between gold and silver shall be as 1:14.75— When the value of silver is established and the difference between that and gold, the necessary calculations may soon be made; calculating agreeably to the above difference 14.75×5253.6 the number of fine grains of gold in a pound troy, after deducting therefrom half per cent. for coinage, will be the number of grains of fine silver that must be given for a pound troy of uncoined gold. $100 : 0.5 :: 5280 : 26.4$ 26.4 $5253.6 \times 14.75 = 77.490, 60$ the number of grains of fine coined silver, that must be given for 5280 grains of fine uncoined gold; which divided by 350.9 gives the dollars and parts thereof, which must be given for the same. $350,9 \mid 77.490.60 \mid 220.832$ dollars and parts.

18

If then 5,253.6 fine coined gold has 220 dollars, 8 dimes, 3 cents, and 2 mills, what will 5,280 have, the number of grains of fine gold in a pound troy of standard gold, after it is coined? $5,253.6 : 220.832 :: 5,280 : 221.943$

Thus it appears that a pound troy of standard gold after coined, will be worth 221 dollars, 9 dies, 4 cents and 3 mills.

The proportion of coined silver to be given for uncoined gold, will be as follows: 1 lb. uncoined gold = 220.832 } 1 oz. ditto, - - = 18.402 1 dwt. ditto, - - = 0.920 1 grain, ditto, - - = - 0.038 } Dollars and parts that must be given for uncoined gold.

All coined gold will be 14.75 more than coined silver.

From these calculations may be made the following **TABLES**. [table]

19

[table]

Library of Congress

A Louis d'or contains 117 # grains, of fine Gold.

An English guinea contains 118.6 ditto.

The Louis d'ors is worth in France, of fine Silver, $117.3 \times 14.458 = 1695.923$ grs. In England it would be worth 117.3×15.725 1768. Difference. 72.077 The guinea is worth in England, grs. of fine silver, 118.6×15.725 1787.298 And would be worth in France no more than 118.6×14.458 1714.718 Difference. 72.580

As coined gold, the guinea will be worth in the Unit. St. $118.6 \times 14.75 = 1749.35$ grains fine silver = 4.985 dols. or 20S9 $\frac{1}{2}$.

As coined gold, the Louis d'or will be worth in the U.S. 117.3×14.75 1730.175 grains fine silver = 4.93 dols. or 20S6 $\frac{1}{2}$, sterling.

The above calculations are made upon the supposition that English and French weights are the same; but this not being the case, the calculations will vary accordingly.

As American and English weights are the same, the comparison between French and English weights will afford a true principle for calculation.

20

The comparison between **FRENCH** and **ENGLISH WEIGHTS** is, viz.

The French ounce is $\frac{1}{8}$ of the mark, and contains 576 grains; it is lighter than that of London, by $\frac{1}{64}$ that is to say, 64 ounces of France weight only 63 ounces English, and of course the English ounce weights $585 \frac{1}{7}$ grains of the French mark. *French English* The French mark weighing 8 ounces. 4.608 3,780 grains The ounce weighing 8 drachms. 576 472.1/2 The drachm weighing 3 penny wts. 72 59.1/16 The penny weight. 24 19.11/16 The louis d'or. 153.10 The English pound of 12 ounces. 7,021.5/7 5,760 1 ounce. 585.1/7 480 1 dwt. 29.9/37 24 The English guinea 157.623/493 129.39/89

COPPER.

Copper being a hard and impure metal, does not, as gold and silver, require any alloy to prevent its being impaired in currency.

It is proposed that a pound avoirdupois weight, shall be divided into fifty coppers, and also into one hundred half-coppers: But this division is proposed upon a supposition that the dollar will be fixed agreeably to the above calculation. If that should be altered, this division should also be altered.

21

The following Tables are calculated to shew how the Decimal Arithmetic will operate in the Division of a Crown at 5S.—a Dollar at 4S6— and a Dollar at 4S2 sterling Money. **TABLE of CROWNS at 5s. Sterling.** [table]

22

TABLE of DOLLARS at 4S6 Sterling. [table] **TABLE of DOLLARS** at 4S2 Sterling. [table]

23

TABLE of 4S2 Sterling continued. [table]

TABLE fixing the Dollar or Money Unit 6S3 Sterling. [table]

24

TABLE at 6S3 Sterling continued. [table] **TABLE** fixing the Money Unit at 12/6 Sterling. [table]

25

TABLE at 12S6 continued. [table]

Library of Congress

The Board of Treasury, to whom it was referred to report the form of an Ordinance for the Establishment of a **MINT**, and the proposals of sundry Individuals relative to Copper Coinage,—

Beg leave to report to Congress,—

THAT after a mature consideration of this subject, they are of opinion, that it is necessary to submit to the consideration of Congress, certain principles relative to the weight and alloy of gold and silver coins, their proposed relative value, the value of foreign coin, and the money of account, previous to framing the proposed ordinance—they therefore submit the following propositions:

That the standard of the United States of America for gold and silver shall be eleven parts fine, and one part alloy.

That the money unit of the United States (being by the resolve of Congress of the 6th July last a dollar) shall contain of fine silver, five hundred and twenty-one grains, and seventy-three hundredths of a grain.

That the money of account to correspond with the division of coins, agreeably to the above resolve, shall proceed in a decimal ratio, according to the terms and measures following: *Mills*, The lowest money of account, of which one thousand shall be equal to the money unit, or dollar, 0.001 *Cents*, The highest copper piece, of which one hundred shall be equal to the dollar, 0.010 *Dimes*, The lowest silver coin, of which ten shall be equal to the dollar, 0.100 *Dollar*, The highest silver coin, 1.000

That between the dollar and the lowest copper coin as fixed by the resolve of Congress of the 6th July last, there shall be three silver coins and one copper coin.

That the silver coins shall be as follows: One coin containing two hundred and sixty grains and ninety-six hundredths of a grain of fine silver, to be called *An Half Dollar*.

Library of Congress

One coin containing one hundred and four grains and three hundred and forty-six thousandths of a grain of fine silver, to be called *A Double Dime*.

One coin containing fifty-two grains and one hundred and seventy-three thousandths of a grain of fine silver, to be called *A Dime*.

That there shall be three gold coins as follows: One containing three hundred and forty-seven grains and eighty-two hundredths of a grain of fine gold, equal to ten dollars, to be stamped with the impression of the American eagle, and to be called *An Eagle*.

One containing one hundred and seventy-three grains and ninety-six hundredths of a grain of fine gold, to be stamped in like manner, and to be called *An Half Eagle*.

And one containing eighty-six grains and ninety-eight hundredths of a grain of fine gold, to be stamped in like manner, and to be called a *A Quarter of an Eagle*.

That the mint price for one pound troy weight of uncoined gold, eleven parts fine and one part alloy, shall be one hundred and fifty-one dollars, no dimes, three cents and eight mills.

27

That the mint price of a pound troy of uncoined silver, eleven parts fine and one part alloy, shall be nine dollars, nine dimes and two cents.

That foreign coin shall be current at the treasury of the United States at the mint price.

That the two copper coins shall be as follows: One equal to the one hundredth part of a federal dollar, to be called a *Cent*.

And one equal to the two hundredth part of the federal dollar, to be called *An Half Cent*.

That three pounds avoirdupois weight of coppers shall be divided into one hundred cents.

REMARKS ON THE WITHIN REPORT.

If the federal dollar or money unit of the United States should be fixed at $\frac{8}{4}$ lawful money, the decimal arithmetic will be more accurate and exact than if it should at either 4S6 or 4S2 sterling, and the divisions would correspond with the known coins.

The standard for silver of Great-Britain is 11 oz. 2 dwts. fine, and 18 dwts. alloy in the pound troy.

As it is proposed that the standard for silver of the United States shall be eleven parts fine and one part alloy, there will be a difference of $\frac{9}{10}$ of one per cent in favor of the British standard for silver.

A pound troy weight of silver in England contains 5328 grains of fine silver, and when coined is issued to the public at the rate of 62S. sterling, or 82S8 lawful money.

If therefore two percent should be allowed for waste and coinage, and this is added to the 82S8, it will amount to 84S4, which is equal to 1012d.

The following proportion will shew the quantity of fine silver that the federal dollar must contain: 1012d. : 5280 :: 100 : 521.73 grains of fine silver.

The two percent for coinage, and the $\frac{9}{10}$ of one per cent difference of alloy, will make the real difference between American and British silver money $2\frac{9}{10}$ per cent in favor of the British.

If the relative value between gold and silver should be fixed as one of the former to fifteen of the latter, and there should be a difference in favor of coined gold when compared with uncoined gold of one half per cent, the following calculations will shew the number of grains of gold that the golden pieces ought to contain.

Library of Congress

As the pound troy of silver is equal to 1012d. the pound troy of gold at the difference of one for fifteen will be equal to 15,180d.

28

If 5280 grains of fine gold, when coined, shall be worth 15.180d.—then a thousand pence or ten dollars will have 347,82 grains of fine gold. $15,180 : 5280 :: 1000 : 347,82$.

If there should be three gold coins, their weight and value will be as follows:

1 piece equal to 1000d. or ten dollars, weight 347.82 grains fine gold. 1 do. 500d. or five dollars do. - 173.91 do. do. 1 do. 250d. or 2 ½ dollars do. - 86.95 do. do.

The following **TABLES** shew the relative value of Coined and Uncoined Silver and Gold, on the principles of the within report. [table]